

Amendments to the Claims

This listing of claims will replace all prior versions of claims in the application.

1-12 (Canceled)

13. (Previously presented) An absorbent sheet formed by:

(a) bleaching cellulosic fiber and producing fiber with a durable elevated curl index by way of a process comprising:

(1) feeding a first cellulosic pulp including Kraft fiber to a refining gap defined between opposed surfaces, at least one of the surfaces being rotatable with respect to its opposed surface;

(2) concurrently heat-treating, bleaching and convolving the cellulosic fiber pulp including Kraft fiber in the refining gap at elevated temperature and pressure at high consistency in a bleaching liquor under conditions selected so as to preclude substantial fibrillation and attendant paper strength and fiber bonding development;

(3) recovering said pulp wherein the length weighted curl index of the treated fiber is at least about 0.12; and

(b) incorporating the Kraft fiber with the elevated curl index provided by way of steps (a)(1), (a)(2) and (a)(3) in the absorbent sheet by mixing pulp prepared by way of steps (a)(1), (a)(2) and (a)(3) with a second pulp having a lower length weighted curl index to produce a mixed pulp having a length weighted curl index intermediate the fiber with the elevated curl index and the second pulp; and forming an absorbent sheet from the mixed pulp.

14 - 63 (Canceled)

64. (Previously presented) The absorbent sheet according to Claim 13, wherein said step of heat-treating and convolving said fiber has a duration of from about 0.01 to about 20 seconds.
65. (Previously presented) The absorbent sheet according to Claim 13, wherein said step of heat-treating and convolving said fiber has a duration of less than about 10 seconds.
66. (Previously presented) The absorbent sheet according to Claim 13, wherein said step of heat-treating and convolving said fiber has a duration of less than about 5 seconds.
67. (Previously presented) The absorbent sheet according to Claim 13, wherein said step of heat-treating and convolving said fiber has a duration of less than about 2 seconds.
68. (Previously presented) The absorbent sheet according to Claim 13, wherein said step of heat-treating and convolving said fiber is carried out at a temperature of from about 230°F to about 370°F.
69. (Previously presented) The absorbent sheet according to Claim 13, wherein mechanical energy input to said fiber during said heat-treating and convolving step is less than about 2 HP day/ton.
70. (Previously presented) The absorbent sheet according to Claim 13, wherein said fiber comprises secondary fiber.
71. (Previously presented) The absorbent sheet according to Claim 13, wherein said fiber consists essentially of secondary fiber.
72. (Previously presented) The absorbent sheet according to Claim 13, wherein said fiber consists of secondary fiber.

73. (Previously presented) An absorbent sheet incorporating secondary fiber which has been concurrently bleached, heat-treated and convolved in a refining gap, wherein the step of heat-treating and convolving the fiber had a duration of from about 0.01 to about 20 seconds and wherein said secondary fiber has a length weighted curl index of at least about 0.12, the absorbent sheet also containing secondary fiber having a lower length weighted curl index than the concurrently bleached, heat treated and convolved fiber which is mixed with the heat-treated and convolved secondary fiber prior to forming the sheet.
74. (Canceled)
75. (Previously presented) The absorbent sheet according to Claim 73, wherein said step of heat-treating and convolving said secondary fiber had a duration of less than about 10 seconds.
76. (Previously presented) The absorbent sheet according to Claim 73, wherein said step of heat-treating and convolving said secondary fiber had a duration of less than about 5 seconds.
77. (Previously presented) The absorbent sheet according to Claim 73, wherein said step of heat-treating and convolving said secondary fiber had duration of less than about 2 seconds.
78. (Previously presented) The absorbent sheet according to Claim 73, wherein said step of heat-treating and convolving said secondary fiber is carried out at a temperature of from about 230°F to about 370°F.
79. (Previously presented) The absorbent sheet according to Claim 73, wherein mechanical energy input to said secondary fiber during said heat-treating and convolving step is less than about 2 HP day/ton.
80. (Previously presented) The absorbent sheet according to Claim 73, wherein said sheet has a porofil value of at least 8.6.

81. (Previously presented) The absorbent sheet according to Claim 80, wherein said sheet has a porofil value of at least 9.4.

82. (Previously presented) The absorbent sheet according to Claim 80, wherein said sheet has a porofil value of at least 10.3.

83-84 (Canceled)

85. (Previously presented) An absorbent sheet formed by:

(a) bleaching cellulosic fiber and producing fiber with a durable elevated curl index by way of a process comprising:

- (1) feeding a first cellulosic pulp including Kraft fiber to a refining gap defined between opposed surfaces, at least one of the surfaces being rotatable with respect to its opposed surface;
- (2) concurrently heat-treating, bleaching and convolving the cellulosic fiber pulp including Kraft fiber in the refining gap at elevated temperature and pressure at high consistency in a bleaching liquor under conditions selected so as to preclude substantial fibrillation and attendant paper strength and fiber bonding development;
- (3) recovering said pulp;
- (4) wherein the length weighted curl index of the treated fiber is at least 20% higher than the length weighted curl index of the fiber prior to treatment;
- (5) wherein further, the step of heat-treating and convolving the fiber has a duration of from about 0.01 to about 20 seconds; and

(b) incorporating the Kraft fiber with the elevated curl index provided by way of steps (a)(1), (a)(2), (a)(3), (a)(4) and (a)(5) in the absorbent sheet by mixing pulp prepared by way of steps (a)(1), (a)(2), (a)(3), (a)(4) and (a)(5) with a second pulp having a lower length weighted curl index to produce a pulp having a length weighted curl index intermediate the fiber with the elevated curl index and the second pulp; and forming an absorbent sheet from the mixed pulp.

86. (New) The absorbent sheet according to Claim 85, wherein the step of concurrently heat-treating and convolving the fiber is carried out at a pressure of from about 5 psig to about 150 psig.

87. (New) The absorbent sheet according to Claim 85, wherein the step of concurrently heat-treating and convolving the fiber is carried out at a pressure of from about 10 psig to about 90 psig.

88. (New) The absorbent sheet according to Claim 85, wherein the step of concurrently heat-treating and convolving the fiber is carried out at a temperature of from about 230°F to about 370°F.

89. (New) The absorbent sheet according to Claim 85, wherein the step of concurrently heat-treating and convolving the fiber is carried out at a pressure of from about 5 psig to about 150 psig and a temperature of from about 230°F to about 370°F.